- # Techniques **for Processing Oil--Chip Mosaic** (OCM) **Images From Galileo**

Thomas **F.** Thaller, Amy Culver, Gary M. Yagi, Helen B. Mortensen

Jet Propulsion Laboratory
California Institute of Technology
Pasadena, Ca

With the partial deployment of Galileo's high-gain antenna came
the need for alternate techniques for maximizing the amount of
science data returned for the Solid State Imaging (SS1) Camera
through the low-gain antenna system. One such technique is called
an On-Chip Mosaic (OCM) . The OCM technique instructs the SSI
camera to store more than one image or shuttered event in it's 800
line x 800 sample CCD array. These multiple shutter events are
downloaded simultaneously in the form of a single image. Thus the
Galileo spacecraft is able to return multiple images in the same
amount of bits for one image. Both flight and ground based
software was developed for the OCM technique. JPL's Multimission
Image Processing System (MIPS) developed the ground base software
to reconstruct both OCM and the individually shuttered images to
be used in scientific analysis by the SSI Team. The focus of the
poster will be to explore the challenges and solutions of **OCM**
image mosaicking procedures. Specifically, procedures to identify
and extract a single shutter event from an OCM image, link that.
image with the associated ancillary data through use of SPICE
kernels and register multiple shutter events together to generate
a color composite image.